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APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/625,898		07/24/2003	Peter Hemingway	23615/9	1195	
22879	7590	02/16/2005	EXAMINER			
		ARD COMPAN	LEE, PATRICK J			
P O BOX 27	72400, 34	104 E. HARMON				
INTELLEC'	TUAL PI	ROPERTY ADMI	ART UNIT	PAPER NUMBER		
FORT COL	LINS, C	O 80527-2400	2878			
				DATE MAILED: 02/16/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

·		Application	n No.	Applicant(s)	- WO				
	10/625,89	8	HEMINGWAY, PETER						
Office Action Sur	Examiner		Art Unit						
		Patrick J. I	_ee	2878					
The MAILING DATE of the Period for Reply	is communication app	ears on the	cover sheet with the	correspondence addres	s				
A SHORTENED STATUTORY THE MAILING DATE OF THIS  - Extensions of time may be available unde after SIX (6) MONTHS from the mailing did.  - If the period for reply specified above, it is no period for reply is specified above, it is not	COMMUNICATION.  r the provisions of 37 CFR 1.13  ate of this communication.  ss than thirty (30) days, a reply  me maximum statutory period w  period for reply will, by statute,  three months after the mailing	36(a). In no eve within the statu will apply and wil cause the appli	nt, however, may a reply be tir tory minimum of thirty (30) day I expire SIX (6) MONTHS from ication to become ABANDONE	mely filed  ys will be considered timely.  the mailing date of this communicity (35 U.S.C. § 133).	nication.				
Status									
2a)☐ This action is <b>FINAL</b> .  3)☐ Since this application is in	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.								
Disposition of Claims									
4a) Of the above claim(s)  5) ☐ Claim(s) is/are allo  6) ☒ Claim(s) <u>1-11</u> is/are reject  7) ☐ Claim(s) is/are obj	<ul> <li>✓ Claim(s) 1-11 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>☐ Claim(s) is/are allowed.</li> <li>☒ Claim(s) 1-11 is/are rejected.</li> <li>☐ Claim(s) is/are objected to.</li> <li>☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>								
Application Papers									
9)⊠ The specification is object 10)⊠ The drawing(s) filed on 24 Applicant may not request the Replacement drawing sheet 11)□ The oath or declaration is	<u>Huly 2003</u> is/are: a)[nat any objection to the objection	accepted arawing(s) be ion is require	e held in abeyance. Se ed if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.	• •				
Priority under 35 U.S.C. § 119									
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
Attachment(s)  1) Notice of References Cited (PTO-892 2) Notice of Draftsperson's Patent Draw 3) Information Disclosure Statement(s) ( Paper No(s)/Mail Date 0703.	ing Review (PTO-948)		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:		)				

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#### **DETAILED ACTION**

## **Drawings**

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: With respect to figure 5, label "36" for the coated surface is not located in the figure. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

# Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

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4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 5, the use of the term "angle switching means" is vague as it could refer to the physical movement of LEDs to attain a different angle. For the purposes of examination, it will be assumed that the physical movement is not a part of this invention.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being obvious over US 5,000,569 to Nylund.

With respect to claims 1, 6, 8, & 10, Nylund discloses a color sensor comprising LEDs (42, 44, 46, 48, 50, 52) and viewers (38, 40) to detect light from sample (16), located on conveyer belt (14). Viewers (38, 40) have a plurality of photocells (86, 86') as photosensitive devices. There is a switching mechanism (124, 125) to switch between the two viewers (38, 40) to receive the output signals from viewers (38, 40) at different times into a multiplexer (126) (see column 7, lines 60-66). The detectors are capable of producing signals in different regimes of light (red, green and IR) (see column 8, lines 1 –14). It is not explicitly stated that the photocells are LEDs, but it

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would be obvious to modify photocells (86, 86') into LEDs are both are functional equivalents as they are capable of detecting light and producing a signal of different wavelengths.

With respect to claims 2 & 4, the modified Nylund figure 2 clearly illustrates the photosensitive devices to be oriented at different angles.

With respect to claim 3, the modified Nylund discloses light emitters (42, 44, 46, 48, 50, 52) to emit light, while photosensitive devices (86, 86') are used to detect light.

With respect to claims 5, 7, & 11, the modified Nylund discloses control devices (134A, 134B) to control the activation of emitters (42, 44, 46, 48, 50, 52).

With respect to claim 9, Nylund does not explicitly state the use of a switching means to activate some emitters for light emission and others for light detection, but such would have been obvious to one of ordinary skill in the art in order to get as many perspective images of the sample as possible. This would allow for increased detection capability of the device.

## Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,639,669 B2 to Hubble, III et al discloses a spectrophotometer.

US 3,724,951 to Seelbinder discloses a spectral radiation detector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Lee whose telephone number is (571) 272-

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2440. The examiner can normally be reached on Monday through Friday, 8:00 am to

5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Patrick J. Lee Examiner

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**PJL** 

February 3<sup>rd</sup>, 2005

Stephone B. Allen

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**Primary Examiner**